

SEVAST'YANOV, S.I., kand.tekhn.nauk

Factors affecting the consumption of lubricating oils in
diesel locomotives. Trudy TSNII MPB no.180:79-113 '59.
(MIRA 13:4)

(Diesel locomotives--Lubrication)

SEVAST'YANOV, S.I., kand. tekhn. nauk

Ways for reducing lubricant expenditure on high-speed diesel.
locomotives. Elek. i tepl. tiaga 7 no.9:31-32 S '63.
(MIRA 16:10)

FUFRIYANSKIY, N.A., prof., doktor tekhn.nauk; ZELENetskAYA, I.S., kand.tekhn.
nauk; VOLODIN, A.I., kand.tekhn.nauk; SEVAST'YANOV, S.I., kand.tekhn.nauk

Quality of fuel and oil for locomotive diesels. Zhel.dor.transp. 46
no.11:40-43 N '64. (MIRA 18:1)

ACCESSION NR: AP4043282

S/0065/64/000/008/0053/0057

AUTHOR: Sevast'yanov, S. I.

TITLE: Evaluation of the detergent and anticarbon-forming properties of diesel oils in service

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 8, 1964, 53-57

TOPIC TAGS: diesel oil, detergent, carbon residue, D-11 oil, M-14A oil, M-12V oil, sulfur containing diesel fuel

ABSTRACT: A new method has been developed for evaluating the detergent and anticarbon-forming properties of diesel oils in service in diesel locomotives. This method is based on data accumulated from 1958 to 1963 at the Liski Depot on the use in 2D100 engines of TEZ diesel locomotives of D-11 oil (from Baku crudes), M-14A oil (from Volgograd crudes), and M-12V oil (from sulfurous crudes and with the VNII NP-360 additive) and diesel fuel containing 0.15—0.9% sulfur. In the new method, detergent and anticarbon-forming properties are evaluated from the weight of the carbon residue in piston oil-cooling channels, the piston ring mobility, and the change in

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ACCESSION NR: AP4043282

fuel consumption. The carbon residue in oil-cooling channels, which is directly proportional to the percentage of sulfur in the fuel, is a highly sensitive index of the anticarbon-forming properties of diesel oil. The carbon residue in oil-cooling channels is one-half as much for M-12V oil as for the additive-free D-11 and M-14A oils. The use of M-12V oil led to a sharp drop in the rate of ring replacement as a result of piston bottom cracks and burning through. However, the use of M-12V oil also caused an increase in carbon residue (ash type) on piston tops; this residue contributes to abrasive wear of cylinder sleeves and creates a ring breakage rate somewhat higher than with D-11 oil. Orig. art. has: 2 figures and 1 table.

ASSOCIATION: TsNII MPS

SUBMITTED: 00

ATD PRESS: 3075

ENCL: 00

SUB CODE: FP

NO REF SOV: 004

OTHER: 000

Card

2/2

SEVAST'YANOV, S.I., kand. tekhn. nauk

Effect of various factors on the efficiency of main and crankpin
bearings on 2D100 diesel locomotives. Trudy TSNII MPS no.277:44-
60 '64. (MIRA 17:6)

SEVAST'YANOV, S.I.

Evaluating the detergent and antiscaling properties of diesel lubricants under operating conditions. Khim. i tekhn. topl i masel 9 no.8:53-57 Ag '64. (MIRA 17:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zheleznodorozhnogo transporta Ministerstva putey soobshcheniya.

SEVAST'YANOV, S.I.

Effect of the activation of lubricating oils toward an increase in the number of failures of Diesel locomotive parts. Fiz.-khim. mekh. mat. 1 no.1:12-15 '65.

(MIRA 19:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zheleznodorozhnogo transporta Ministerstva putey soobshcheniya. Submitted August 25, 1964.

L 46290-65

S/0000/64/001/000/0166/0170

ACCESSION NR: AT5009053

AUTHOR: Dovgii, V. A. (Novosibirsk); Domaratkiy, A. N. (Novosibirsk);
Sevast'yanov, S. S. (Novosibirsk); Sinitsyn, B. S. (Novosibirsk)

8
B+1

TITLE: On the construction of arithmetic units for digital correlators

SOURCE: Konferentsiya po avtomaticheskomu kontrolyu i metodam elektricheskikh izmereniy. 3d, Novosibirsk, 1961. Avtomaticheskii kontrol' i metody elektricheskikh izmereniy; trudy konferentsii, t. 1: Metody elektricheskikh izmereniy. Analiz i sintez sistem upravleniya i kontrolya. Elementy ustroystv avtomaticheskogo kontrolya (Automatic control and electrical measuring techniques; transactions of the conference, v. 1: Electrical measuring techniques. Analysis and synthesis of regulation and control systems. Elements of automatic control devices). Novosibirsk, Redizdat Sib. otd. AN SSSR, 1964, 166-170

TOPIC TAGS: digital correlator, arithmetic unit, logic network, spectral density, correlation function

ABSTRACT: The arithmetic unit is intended for the calculation of the correlation function

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ACCESSION NR: AT5009053

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$$R_x(\tau) = \frac{1}{N} \sum_{t=1}^N x(t) x(t+\tau).$$

which involves the summation of N products and dividing the result by N. Four variants of performing the multiplication in the binary system and in a direct code are described, as is the logical circuit of the entire arithmetic unit. The arithmetic unit is also capable of calculating the spectral density if the correlation function is known beforehand. The procedure for this operation is described. If a magnetic drum memory is used and the integration interval is broken up into 1024 sections, the arithmetic unit can determine 128 points of the correlation function within 2--3 minutes. Orig. art. has: 3 figures and 2 formulas.

ASSOCIATION: None

SUBMITTED: 13Apr64

ENCL: 00

SUB CODE: DE, IE

NR REF SOV: 002

OTHER: 003

Card *sh* 2/2

SEVAST'YAN, A.G.; BARANOVA, A.G.

Mechanization of the brick feed for repairing blast furnaces.
Dzul. tekhn.-ekon. inform. Gos. nauch.-issl. inst. nauch. i tekhn.
inform. 18 no.7:5 J1 '65. (MIRA 18:9)

SEVAST'YANOV, S.S.

Increasing the stability of main crowns of open-hearth
furnaces. Biul. tekhn.-ekon. inform. Gos. nauch.-issl.
inst. nauch. i tekhn. inform. 18 no.2:12-13 F '65.

(MIRA 18:5)

SEVAST'YANOV, T.N.

99-7-4/14

SUBJECT: USSR/Irrigation

AUTHOR: Kostin, A.I., Candidate of Mechanical Sciences and Sevast'yanov, T.N., Engineer.

TITLE: "Improvement of the Discharge Section of Tubular Structures".
(Usovershenstvovaniye vykhodnoy chasti trubchatogo sooruzheniya)

PERIODICAL: "Gidrotekhnika i Melioratsiya", 1957, # 7, pp 20-23, (USSR)

ABSTRACT: Tubular structures are largely used at water discharge points of irrigation systems. So far, none of the different discharge nozzles which have been developed in the past have proved satisfactory. The newly developed damper KS-1 (KC-1) meets the requirements. It consists of 4 square cross sectional beams, which form a girder partition. The lowest beam is installed on the bottom, the distances of the individual beams being 1/10 of the pipe's diameter. Since the upper section of the tube is not obstructed by a beam, danger of plugging is greatly reduced. In the event of clogging by objects carried by the water, cleaning can easily be accomplished by 2 workers. Reduced velocity of the water current permits considerable savings at the construction of the lower pools. Another advantage of

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99-7-4/14

TITLE: "Improvement of the Discharge Section of Tubular Structures",
(Usovershenstvovaniye vykhodnoy chasti trubchatogo scorusheniya)
the new damper is the fact, that it can also be used at open
structures.
The article contains 1 figure.

ASSOCIATION: Central Asiatic Scientific Research Institute for Irrigation
(SANIIRI)
Sredneasiatskiy Nauchno-Issledovatel'skiy Institut Irrigatsii
(САННИИРИ)

PRESENTED BY:

SUBMITTED:

AVAILABLE: At the Library of Congress.

Card 2/2

SEVAST'YANOV, T.N., Cand Tech Sci --(diss) "^KRationalization
of ^{preferable}~~composite~~ pipe coupling structures in the experiment of ^{ence}~~ment~~ of ^{the}
constructing the Don irrigation systems." Ashkhabad, 1958,
20 pp with drawings (Min of Higher Education Uk⁵SR. Kiev
Inst of Engineers of Water ^{Resources}~~Control~~) 160 copies (KL, 42-58, 116)

- 44 -

SEVAST'YANOV, V., general-mayor inzhenernykh voysk; OGORODNIKOV, V.,
general-mayor inzhenernykh voysk

Engineering equipment for the defense zone of a rifle company.
Voen.vest. 40 no.1:126-127 Ja '61. (MIRA 13:12)
(Russia--Army--Infantry)

TARAN, P., kand.tekhn.nauk; PRISTAVKA, A.; ZYMALEV, G.; SHALIMOV, A.;
SEVAST'YANOV, V.

Speeding-up the rate of increase of labor productivity in the
Dnepropetrovsk Economic region. Sots. trud 5 no.9:98-108 S '60.

(MIRA 13:10)

1. Glavnyy inzh. tresta "Leninruda" (for Taran).
2. Zam.nachal'nika
tekhnicheskogo otdela tresta "Leninruda" (for Pristavka).
3. Upravl-
yayushchiy trestom "Dzerzhinskruuda" (for Zymalev).
4. Nachal'nik
otdela organizatsii truda tresta "Dzerzhinskruuda" (for Shalimov).
5. Zam. direktora po trudu i kadram zavoda im. Dzerzhinskogo
(g.Dneprodzerzhinsk) (for Sevast'yanov).
(Krivoy Rog Basin--Iron mines and mining--Labor productivity)
(Dneprodzerzhinsk--Steel industry)
(Socialist competition)

L 05410-67 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWT(1)

ACC NR: AT6022758

SOURCE CODE: UR/2563/65/000/259/0107/0114

AUTHOR: ~~Bramnikov, V. G.~~; Yesin, A. I.; Ineshin, A. P.; Sevast'yanov, V. A.

ORG: None

TITLE: Analysis of the dynamics of a self-saturating magamp drive with intermediate semiconductor amplifiers

SOURCE: Leningrad. Politekhnikheskiy institut. Trudy, no. 259, 1965. Perekhodnyye protsessy v avtomatizirovannom elektroprivode (Transient processes in automated electric drive), 107-114

TOPIC TAGS: magnetic amplifier, machine tool, industrial automation

ABSTRACT: The authors consider the use of intermediate semiconductor amplifiers as a means for reducing the time constant in self-saturating magnetic-amplifier circuits used in combination with electric motors for driving the feed screws of machine tools. An analysis of transition processes in this type of system shows that linear operation of the intermediate semiconductor amplifier in self-saturating magamp-motor drive combinations has no noticeable effect on the time constant of the drive. The interference voltage acting through the correction circuit in an actual drive puts the intermediate amplifier into conditions of artificial switching with a frequency of 300 cps which increases the time of the transition process by a factor of more than 1.5. Class D

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L 05410-67

ACC NR: AT6022758

intermediate semiconductor rectifiers with pdm may be used satisfactorily for wide-range control in self-saturating magamp drives. The small losses in the output transistor of the amplifier in both the open and closed states result in considerable power delivery at high efficiency to the control circuits of the magnetic amplifier. The operation of this transistor is nearly independent of the scatter in its parameters and variations in ambient temperature. The frequency of the intermediate amplifier must be selected with regard to the particular features of the specific magnetic amplifier circuit. The use of low-interference stabilization circuits in conjunction with high-power class D intermediate semiconductor amplifiers provides high-quality drives for wide-range speed control based on self-saturating magnetic amplifier circuits. Orig. art. has: 5 figures, 2 formulas.

SUB CODE: 09, 13/ SUBM DATE: None/ ORIG. REF: 005

Card 2/2 *ld*

SEVAST'YANOV, V. D.

Bee Culture

Influence of growth substances on the propagation and development of bees.
Pchelovodstvo 29 no. 3:28-30 Mr '52

9. Monthly List of Russian Accessions, Library of Congress, July 195~~8~~² Uncl.

SEBASTYANOV, V. D.

✓Effect of heteroauxin on the body size of bees. V. D. Sebastyanov (State Univ., Odessa). *Pchelovodstvo* 1953, No. 16, 16-17; *Bee World* 38, 1066 (1957).—After spring feeding with heteroauxin, the tongue, wings, and 2nd and 3rd sternites of the workers were larger than normal. An earlier paper (*ibid.* 1952, No. 3, 25-30) reports that auxin feeding with growth-promoting substances (including heteroauxin) increases laying, shortened the time of development of bees, and stimulated wax production. F. H. Well

md

USSR / General and Special Zoology. Insects. Physio- P
logy and Toxicology.

Abs Jour: Ref Zhur-Biol.; No 1, 1959, 2236.

Author : Savchuk, N. A.; Sevastyanov, V. D.

Inst : University of Odessa.

Title : On the Difference between Male and Female In-
sects' Reactions to Heteroauxin.

Orig Pub: Nauchn. yezhegodnik Odessk. un-ta, 1956, Odessa,
1957, 244.

Abstract: The results are reported of a study on the action
of heteroauxin on the cocoons weight and coatings,
as well as on some technological properties of
silk when the males and the females of oak silk-
worm are fed H, the effect of H on the weight
or size of bees and drones when the entire col-
ony was fed on H, as well as when the larvae

Card 1/2

USSR / Farm Animals. The Honeybee. Q

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 7396

Author : Sevast'yanov, V. D.

Inst : Odessa University

Title : The Different Correlation in the Magnitude of
Some Indicators of the Indian (*Apis indica*)
and the Melliferous (*A. mellifera* L.) Bee

Orig Pub : Nauchn. yezhegodnik. Odessk. un-t, 1956, Odessa,
1957, 247-248

Abstract : The presented tables giving the results of
measurements of bees from the apiary of the
TSKha [Timiryazev Academy of Agriculture]
(Moscow) and local bees (Odessa) show that
there exist significant differences between
them in terms of absolute sizes as well as
body proportions.

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69

USSR / Farm Animals. The Honeybee.

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 7399

Author : Sevast'yanov, V. D.

Inst : Odessa University

Title : The Magnitude of Seasonal Changes of Bees
in the City of Odessa

Orig Pub : Nauchn. yezhegodnik. Odessk. un-t, 1956,
Odessa, 1957, 248-249

Abstract : By measuring bee sizes in the course of a
season it was established that by comparison
to the first springtime replenishment, some
indicators of bees which were taken from bee-
hives at various months, vary by up to 3 per-
cent.

Card 1/1

SEVAST'YANOV, V.D., kand.biol.nauk

Use of silicate glue in making microscopical preparations.
Biol. v shkole no.4:88 J1-Ag '58. (MIRA 11:9)

1. Odesskiy gosudarstvennyy universitet.
(Microscopy--Technique) (Glue)

SAVCHUK, M.P., prof.; SEVAST'YANOV, V.D., kand.biol.nauk

Using potassium salt of indoleacetic acid as a stimulating
feed supplement for bees. Na dopom.sil'.hosp.ta vyr. no.5:
11-13 '58, (MIRA 13:3)

1. Kafedra zoologii bespozvonochnykh Odesskogo gosuniver-
siteta. 2. Chlen-korrespondent AN USSR (for Savchuk).
(Bees--Feeding and feeds) (Indoleacetic acid)

SEVAST'YANOV, V.D.; SEVAST'YANOVA, N.I.

Silicate glue as a medium for permanent specimens of parasitic arthropods. Med.paraz.i paraz.bol. 27 no.6:738-739 N-D '58.
(MIRA 12:2)

1. Iz kafedry zoologii bespozvonochnykh Odesskogo gosudarstvennogo universiteta imeni I.I. Mechnikova i Odesskogo nauchno-issledovatel'skogo instituta epidemiologii i mikrobiologii imeni I.I. Mechnikova.

(INSECTS--COLLECTION AND PRESERVATION)

SEVAST'YANOV. V.D. (Odessa)

Distribution and role of plant growth stimulants in the animal
organism. Usp.sovr.biol. 46 no.2:194-207 S-O '58 (MIRA 11:11)
(GROWTH PROMOTING SUBSTANCES)

USSR / Farm Animals: The Honeybee. Q

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No: 7395

Author : Sevast'yanov, V. D.

Inst : Odessa University, Series of Biological Sciences

Title : The Influence of Heteroauxin upon Changes of the Body's Proportions in Bees

Orig Pub : Tr. Odessk. un-ta. Ser. biol. n., 1957, 147, No 8, 165-170

Abstract : A swarm with a barren queen was supplementary fed for 2 days with a solution of honey (1 part of honey + 3 parts of water) to which 0.002 percent of potassium salt of heteroauxin (H) were added. On the following days the bees were sprayed with the same solution

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SEVASTIANOV, V.

Distribution and role of the plantgrowth stimulants in animal organisms.
p. 113

ANALELE ROMINO-SOVIETICE. SERIA BIOLOGIE (Academia Republicii Populare
Romine. Institutul de Studii Romino-Sovietic
Bucuresti, Rumania
Vol. 13, no. 2, April/June 1959

Monthly list of East European Accession Index (EFAI), LC Vol. 8, No. 11
November 1959
Uncl.

BELOSTOTSKAYA, Z.A. [Bilostots'ka, Z.A.], student biolog.fakul'teta;
SEVAST'YAKOV, V.D., nauchnyy rukovoditel', kand.biol.nauk.

Dynamics of the flight of honey bees and wild pollinators to
hybrid clover during the blooming period. Pratsi Od.un.
Zbir.stud.rob. 149 no.5:151-154 '59. (MIRA 13:4)

1. Odesskiy gosudarstvennyy universitet.
(Bees) (Clover)

SEVAST'YANOV, V.D.

Effect of different food rations on the variability of the mite
Tyrophagus noxius A.Zachv. Nauch. dokl. vys. shkoly; biol. nauki
no.3:21-25 '61. (MIRA 14:7)

1. Rekomendovana kafedroy zoologii bespozvonochnykh Odessk
gosudarstvennogo universiteta im. I.I.Mechnikova.
(MITES) (INSECTS--CLASSIFICATION)

SEVAST'YANOV, V.D.

House mice of Khmel'nitskiy Province as carriers of parasitic and
nonparasitic arthropods. Pratsi Od. Un. 152 Ser. biol. nauk no.12:
49-53 '62. (MIRA 17:9)

SEVAST'YANOV, V.D.; SAMARSKIY, S.L. [Samar's'kiy, S.L.]

Burrows of the mouse (*Mus musculus hortulanus*) and mole rat (*Spalax leucodon*) as places of the reproduction of parasitic arthropods.
Pratsi Od. Un. 152 Ser. biol. nauk no.12:54-59 '62. (MIRA 17:9)

SEVAST'YANOV, V.D.

Introduction to the study of anoetid mites. Zool. zhur. 42
no.9:1338-1345 '63. (MIRA 16:12)

1. Department of Invertebrate Zoology, The State University of
Odessa.

SEVAST'YANOV, V.P.

Number of mites carried and exterminated by the ant *Lasius fuliginosus* Latr. during one season. Zool.zhur. 44 no.11:1651-1660 '65. (MIRA 18:12)

1. Kafedra zoologii bespozvenochnykh Odesskogo gosudarstvennogo universiteta.

467-30
ACC NR: AP7000999 (A.N) SOURCE CODE: UR/0439/65/044/011/1651/1660

AUTHOR: Sevast'yanov, V. D.

ORG: Department of Invertebrate Zoology, Odessa State University (Kafedra zoologii bespozvonochnykh Odesskogo gosudarstvennogo universiteta)

TITLE: Number of mites carried and exterminated by the ant *Lasius fuliginosus* Latr. during a season

SOURCE: Zoologicheskii zhurnal, v. 44, no. 11, 1965, 1651-1660

TOPIC TAGS: mite, mite reproduction, new mite species, disease vector, parasite, ant

ABSTRACT: The ant *Lasius fuliginosus* Latr. carries 26 disease vector species of myrmecophils-mite parasites and usually lives in the soil and rotten wood. The mites live mainly in plants, seldom in the soil. The ants destroy herbivorous mites (genus *Bruobia*, family *Tenuipalpidae*), predacious ones (family *Anistidae*, *Phytoseiidae*) and mites damaging food supply storages (*Tyrophagus noxius* A. Z., *Glycyphagus domesticus* De Geer and others). A new mite species *Dermatophagoides arnoldii* W. Sevastianov sp. n. (family *Epidermoptidae* Trt.,

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UDC: 595.42+595.796:591.5(477.43)

ACC NR: AP7000999

1892) and its reproduction cycle is described. This species is closely related to *Dermatophagoides longior* (Trt) W. Dub., 1953 but differs from it in the structure of the opistosomal shield, dimensions and location of leg epimers, chetotaxy of the anterior body edge, and in some other characteristics. Orig. art. has: 3 tables and 1 figure. [Based on author's abstract] [WA-50]

SUB CODE: 06/ SUBM DATE: none/ ORIG REF: 012/ OTH REF: 010/

Card 2/2

SEVAST'YANOV, V.F.; VOLKOV, I.I.

Redistribution of iron and manganese in the oxidation-reduction processes in the bottom sediments of the oxidation zone in the Black Sea. Lit. i pol. iskp. no.4:72-84 J1-Ag '65. (MIRA 18:9)

1. Chernomorskaya eksperimental'naya nauchno-issledovatel'skaya stantsiya Instituta okeanologii AN SSSR, Gelendzhik.

S/080/62/035/012/006/012
D217/D307

AUTHORS: Ulanovskiy, I.B., Sevast'yanov, V.F. and Korovin,
Yu.M.

TITLE: Influence of hydrogen sulfide on the corrosion of
carbon steel

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 12, 1962,
2674-2678

TEXT: The influence of H_2S , formed by the action of sul-
fate-reducing bacteria in sea water, on the corrosion of carbon
steels was studied by investigating its effects on the rate of cor-
rosion, both in the absence and in the presence of oxygen, and its
corrosive action at various pH values of the corrosive solution.
The effect of the mechanism of oxidation of H_2S on the rate of cor-
rosion was also studied. It was found that corrosion increases in
the absence of oxygen, even at low H_2S concentrations, owing to the
promotion of the anodic reaction, but owing to the stifling of the
cathode reaction, it tends to decrease with time. In the presence

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S/080/62/035/012/006/012
D217/D307

Influence of hydrogen ...

of oxygen, introduction of a small quantity of H_2S reduces the rate of corrosion owing to reduction in oxygen concentration. Corrosion is greatly accelerated under the influence of H_2S on lowering the pH to 5.0 - 4.0, owing to the drastic intensification of depolarization by hydrogen. The mechanisms of oxidation of H_2S into $S_2O_3^{--}$ and SO_4^{--} at a concentration of up to 100 mg/l exerts no influence on the intensity of corrosion. SO_3^{--} ions in the presence of oxygen markedly reduce the rate of corrosion owing to the reduction in oxygen concentration brought about by the oxidation reaction. There are 8 figures and 3 tables.

SUBMITTED: October 24, 1961

Card 2/2

L 11692-66 EWT(1)/EWT(m)/EWP(t)/EWP(b) IJP(c) JD/GW

ACC NR: AP6004395

(N)

SOURCE CODE: UR/0020/66/166/003/0701/0704

AUTHOR: Sevast'yanov, V. F.; Volkov, I. I.

ORG: Black Sea Experimental Scientific Research Station, Institute of Oceanology,
Academy of Sciences, SSSR (Chernomorskaya eksperimental'naya nauchno-issledovatel'
skaya stantsiya Instituta okeanologii Akademii nauk SSSR)

TITLE: Chemical composition of iron-manganese concretions from the Black sea

SOURCE: AN SSSR. Doklady, v. 166, no. 3, 1966, 701-704

TOPIC TAGS: iron oxide, manganese compound, ~~sea-water~~ geochemistry, analytic
chemistry, metal compound

ABSTRACT: The chemical composition of concretions taken from the sea bottom at 15 stations on the Black Sea coast near the Crimea was analyzed. The bulk of the concretions consists of iron and manganese oxides in variable concentrations. The Fe/Mn ratio changes from 1.45 to 28.6. A definite inverse portion is observed between the content of iron and that of manganese. Iron is present only in the trivalent state, and its content ranges from 26.08 to 52.27% (in terms of Fe_2O_3); manganese is present in the divalent state, and its content ranges from 1.83 to 18.02% (in terms

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UDC: 550.41

L 14692-66

ACC NR: AP6004395

of MnO). The active oxygen concentration varies from 0.17 to 3.35%. Substantial amounts of SiO_2 , Al_2O_3 , and CaCO_3 were found. The elements present are divided into three groups: (1) Ni, Co, Cu, Mo, and P, which are characterized by a high geochemical mobility; (2) Ti, Zr, and Cr, which have a low geochemical mobility; (3) V and W, intermediate between the first two groups in mobility. It is concluded that the iron-manganese concretions in present-day bottom sediments are diagenetic formations resulting from the drawing together of authigenic oxidized forms of manganese and iron and of elements combined with these components of the sea bottom. The paper was presented by Academician N. M. Strakhov on 13 October 1965. Orig. art. has: 1 figure, 1 table.

SUB CODE: 08,07/ SUBM DATE: 100ct65/ ORIG REF: 004/ OTH REF: 000

BVK

Card 2/2

L 28543-66 EWT(m)/T/EWA(d)/EWP(t)/ETI IJP(c) JD/WB/GD

ACC NR: AT6013810

(N)

SOURCE CODE: UR/0000/65/000/000/0366/0378

AUTHOR: Golubev, A. I.; Ulanovskiy, I. B.; Korovin, Yu. M.; Sevaat'yanov, V. F.

ORG: none

TITLE: Effect of hydrogen sulfide on the corrosion of stainless and carbon steels

SOURCE: Korroziya metallov i splyavov (Corrosion of metals and alloys), no. 2. Moscow, Izd-vo Metallurgiya, 1965, 366-378

TOPIC TAGS: stainless steel, carbon steel, sea water corrosion, hydrogen sulfide, hydrogen ion / 1Kh18N9T stainless steel, 1Kh13 steel, St. 3 carbon steel

ABSTRACT: H_2S in the sea is produced by sulfate-reducing bacteria which proliferate on barnacle-encrusted ship hulls and subsurface structures. In this connection, for stainless steel the effect of H_2S on electrode potential was investigated as a criterion of corrosion resistance of the steel. For carbon steel, the effect of H_2S on both the electrode potential and the self-dissolution processes was investigated. The experiments were performed in the presence of O_2 concentrations of < 0.1 and 9.0 mg/liter, variation in pH value from 8 to 2 and variation in H_2S concentration from 0 to 100 mg/liter. O_2 was removed by blowdown with N_2 extracted from air. The air, flowing via flow meter 1 (Fig. 1) and safety flask 2, entered cylinders 3-5 containing an alkali solution of pyrogallol in which it was relieved of most of its O_2 . The

Card 1/4

L 28543-66

ACC NR: AT6013810

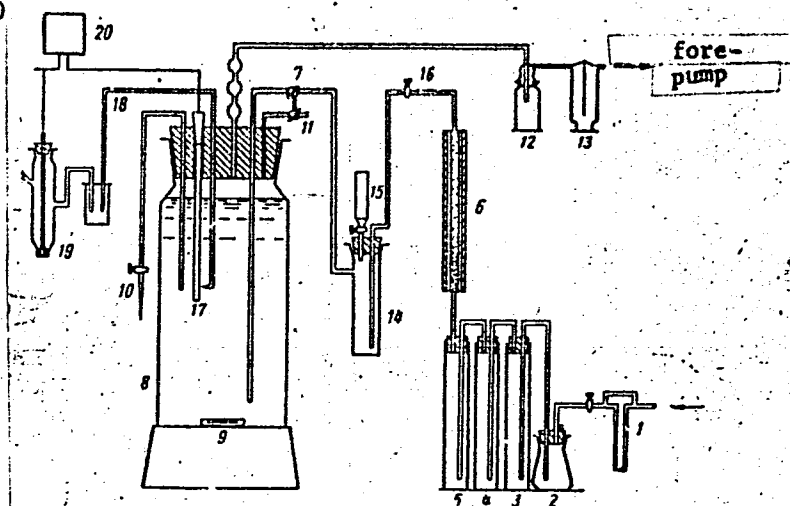


Fig. 1. Diagram of setup for investigating the effect of hydrogen sulfide on the electrode potential in the absence of oxygen:
 1- flow meter; 2 - safety flask; 3, 4, 5 - absorption cylinders; 6 - tubular furnace; 7, 11 - three way valve; 8 - test vessel; 9 - magnetic stirrer; 10 - sampler; 12, 13 - safety flasks; 14 - vessel for producing H₂S; 15 - separatory funnel; 16 - two-way valve; 17 - test specimen; 18 - electrolyte; 19 - calomel electrode; 20 - potentiometer

Card 2/4

L 28543-66

ACC NR: AT6013810

2

remaining O_2 was absorbed in tubular furnace 6 containing copper chips heated to $600^\circ C$. The passage of air was facilitated by rarefaction produced with the aid of a fore-pump, with the rate of air inflow being determined by flow meter 1. Pure N_2 entered vessel 8 via a three way valve 7. To accelerate the process of O_2 removal, the solution was stirred with magnetic stirrer 9. The samples were collected via tube 10. H_2S was produced by reacting HCl with a titrated Na_2S solution. The electrode potentials were measured by means of the P-4 potentiometer and anodic polarization curves were plotted by the potentiostatic method on using cylindrical specimens of 1Kh18N9T and 1Kh13 and St. 3 steels. The experiments were performed in Black Sea water ($pH = \sim 8.0$). Findings: H_2S and the intermediate products of its oxidation definitely affect the electrode potentials and corrosion of stainless and carbon steels. Thus, as the H_2S concentration of sea water increases the electrode potential is displaced in the minus direction owing to the sharp decrease in O_2 concentration stemming from the consumption of O_2 for the oxidation of H_2S . When the pH of sea water is < 5.0 , the corrosion rate in the presence of H_2S gets intensified owing to the facilitation of the process of hydrogen depolarization. The presence of H_2S in sea water markedly affects the anodic passivity of stainless steel (Fig. 2). Thus, in H_2S -free water (curve 4) passive state sets in at a current density of $\sim 3 \mu A/cm^2$, whereas in water with 35 mg H_2S /liter the current density required to attain anodic passivity is 3 times as high; in water with 60 mg H_2S /liter, 9-10 times as high (curve 2); and in water with 80 mg H_2S /liter no passivity is observed (curve 1). Hence the higher the H_2S concen-

Card 3/4

L 28543-66

ACC NR: AT6013810

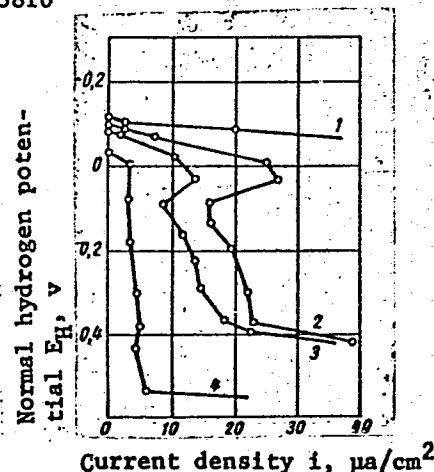


Fig. 2. Anodic polarization curves of 1Kh18N9T steel in sea water in the presence of hydrogen sulfide:

1 - 80 mg/liter H_2S ; 2 - 60 mg/liter H_2S ; 3 - 35 mg/liter H_2S ; 4 - control experiment without H_2S

tration of sea water is -- in the absence of O_2 -- the faster the corrosion rate of steel becomes. If O_2 is present in the solution, the corrosion of carbon steel with increasing H_2S concentration initially decreases owing to the decrease in O_2 content, but later it increases. Orig. art. has: 7 figures, 1 table.

SUB CODE: 13,117,070, 11/ SUBM DATE: 19Jul65/ ORIG REF: 018/ OTH REF: 001

Card 4/4 CC

SEVAST'YANOV, V.G. _____

Association of mineralization with intrusions in the central
part of the Korean Peninsula. Sov.geol. 5 no.8:48-61 Ag '62.
(MIRA 15:9)

1. Yuzhno-Kazakhstanskoye geologicheskoye upravleniye.
(Korea—Ore deposits) (Korea—Rocks, Igneous)

SEVAST'YANOV, V. I.

"Increasing the Salt Resistance of Barleys by Growing Them on Salt Soils." Cand Biol Sci, Rostov-on-Don U, Rostov-on-Don, 1954. (RZhBiol, No 6, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No.521, 2 Jun 55

SEVASTYANOV, V. I.

Sulfonation of 9,10-phenanthrenequinone. I. Sulfonation of phenanthrenequinone to the sulfonic acid. V. I. Sevast'yanov. Zhur. Priklad. Khim. 30, 1249-50 (1957). 25% oleum, 0.5 ml. 30% H₂O₂ and 13 g. phenanthrenequinone was heated 1.25 hrs. with stirring on a boiling H₂O bath, cooled, and poured in a satd. soln. of KCl yielding 94.7% K salt of phenanthrenequinone-2,7-disulfonic acid (I). The acid obtained with HCl did not melt up to 350°. To 25 g. of molten KOH contg. 2 ml. H₂O 5 g. of I was added and heated 15 min. at 315-20°, cooled, dissolved in H₂O, and filtered. The filtrate acidified with HCl, filtered, and treated with Na₂CO₃ pptd. 4,4'-dihydroxydiphenol-2-carboxylic acid (II), m. 269.5-70°. A mixt. of 2 g. II, 3 g. Ca(OH)₂, and 5 g. dry river sand heated to 325-30°, cooled, and the residue recrystd. from EtOH gave 4,4'-dihydroxybiphenyl, m. 273.5-4.6°. I was stable after 10 hrs. at 60° with K₂Cr₂O₇ and in 50% H₂O₂.

Distr: 4E2c(j)/4E3d/4E4j

Jan 1958

4
2 MAY
3

NOVIKOV, I.T.; NEPOROZHNIY, P.S.; LAVRENEENKO, K.D.; BONDARENKOV, N.M.;
MINGGENOV, Ya.I.; PLATONOV, N.A.; SHIKTOROV, I.S.; BELYAKOV,
A.A.; SEVST'YANOV, V.I.; ERISTOV, V.S.; ERISTOV, V.S.
KAZIN, N.V.; MUATSAKANOVA, L.N.; PLATONOV, V.A.; SHKUNIN, B.M.
SHKUNIN, B.M.; ROZANOV, K.A.; LIVSHITS, A.Ya.; LOPATIN, N.A.;
BESTER, P.S.

Sergei Borisovich Fogel'son. Gidr. stroi. 31 no. 1:59-60
Ja '61. (MIRA 14:2)
(Fogel'son, Sergei Borisovich, 1911-1960)

FEDOROV, L.T., kand.tekhn.nauk; LEONT'YEVSKIY, B.B.; GIL'DENBLAT, Ya.D.,
kand.tekhn.nauk; KORENISTOV, D.V.; ROSSINSKIY, K.I., kand.tekhn.
nauk; KUZ'MIN, I.A., kand.tekhn.nauk; KONDRATSKAYA, A.A., inzh.;
NISAR-MUKHAMEDOVA, G.N., inzh.; PANOVA, G.M., inzh.; ROZHDESTVENSKIY,
G.L., inzh.; SEMIKOLENOV, A.S., inzh.; TSAREVSKIY, S.V., inzh.;
ZHUKOVA, M.F., inzh.; GRISHIN, M.M., retsenzent; KRITSKIY, S.N.,
doktor tekhn.nauk, red.; MENKEL', M.F., doktor tekhn.nauk, red.;
GALAKTIONOV, V.D., kand.geol.-min.nauk, red.; ZAVALISHIN, I.S., inzh.,
red.; MALYSHEV, N.A., inzh., red.; MIKHAYLOV, A.V., doktor tekhn.
nauk, red.; PETROV, G.D., inzh., red.; RAPOPORT, Ya.D., red.; RUSSO,
G.A., kand.tekhn.nauk, glavnyy red.; SEVAST'YANOV, V.I., inzh., red.;
TITOV, S.V., inzh., red.; TISTROVA, O.N., red.; LARIONOV, G.Ye.,
tekhn.red.

[Hydrology and water economy of the Volga-Don] Gidrologiia i vodnoe
knoziaistvo Volgo-Dona. Pod red. S.N.Kritskogo i M.F.Menkeliia.
Moskva, Gos.energ.izd-vo, 1960. 146 p. (MIRA 13:11)

1. Moscow. Vsesoyuznyy proyektno-izyskatel'skiy i nauchno-issledo-
vatel'skiy institut "Gidroproyekt" imeni S.Ya.Zhmuk. 2. Deystvitel'-
nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Grishin).
(Don River--Water resources development)

BOIMBCHINSKIY, V.P.; VTOROV, N.A.; DUNDUKOV, M.D.; YEGOROV, S.A., doktor tekhn.nauk, prof.; YERMOLOV, A.I.; ZAVORUYEV, V.P.; KALININ, V.V.; KACHEROVSKIY, N.V.; KUZNETSOVA, A.K.; KUZ'MIN, I.A., kand.tekhn.nauk; MEDVEDEV, V.M., kand.tekhn.nauk; MIKULOVICH, B.F.; MIKHAYLOV, V.V., kand.tekhn.nauk; PETRASHEN', R.N.; REYZIN, Ye.S.; SINYAVSKAYA, V.M.; KHALTURIN, A.D.; SHCHERBINA, I.N., kand.tekhn.nauk; SEVAST'YANOV, V.I., red.; KARAULOV, B.F., retsenzent; LOVETSKIY, Ye.S., retsenzent; MIKHAYLOV, A.V., doktor tekhn.nauk, retsenzent; NATANSON, A.V., retsenzent; SOKOL'SKIY, M.M., retsenzent; STANKEVICH, V.I., retsenzent; FREYGOFER, Ye.F., retsenzent; GORMAN, T.P., red.; VORONIN, K.P., tekhn.red.

[Work of the All-Union Scientific Research Institute for the Study and Design of Hydraulic Structures] Nauchno-issledovatel'skie raboty Gidroproekta. Pod obshchei red. V.I.Sevast'ianova. Moskva, Gos.energ.izd-vo, 1961. 214 p. (MIRA 15:2)

1. Moscow. Vsesoyuznyy proyektno-izyskatel'skiy i nauchno-issledovatel'skiy institut Gidroproyekt imeni S.Ya.Zhuk. Nauchno-issledovatel'skiy sektor.

(Hydraulic engineering--Research)

SEVAST'YANOV, V.I., glav. red.; KUZNETSOV, A.Ya., zam. glav. red.;
MIKHAYLOV, A.V., doktor tekhn. nauk, zam. glav. red.; ABRAMOV,
Yu.S., red.; IVANOV, M.A., red.; PETROV, G.D., red.; RAPOPORT,
Ya.D., red.

[Volga Hydroelectric Power Station (22d Congress of the CPSU);
album of drawings] Volzhskaya gidroelektrostantsiya imeni
XXII s'ezda KPSS; al'bom chertezhei. Moskva, Gosenergoizdat.
Pt.1. [Basic structures] Osnovnye sooruzheniya. 1962. 62 p.
(MIRA 15:5)

1. Moscow. Vsesoyuznyy provektno-izyskatel'skiy i nauchno-
issledovatel'skiy institut "Gidroyekt" imeni S.Ya.Zhmuk.
(Volga Hydroelectric Power Station (22d Congress of the CPSU) —
Design and construction)

SEVAST'YANOV, V.I., inzh.

Flooding the excavation of the Votkinsk Hydroelectric
Power Station and cofferdamming the Kama River. Gidr.
stroï. 32 no.5:10-13 My '62. (MIRA 15:5)
(Cofferdams)
(Votkinsk Hydroelectric Power Station)

KHASKHACHIKH, L.P.; SOKOLOV, B.A.; GENKIN, Ye.M.; SEVAST'YANOV,
V.I., glav. red.; KUZNETSOV, A.Ya., zam. glav. red.;
MIKHAYLOV, A.V., doktor tekhn. nauk, zam. glav. red.;
ABRAMOV, Yu.S., red.; IVANOV, M.A., red.; PETROV, G.D.,
doktor tekhn. nauk, red.; CHEMIN, A.N., red.

[Volga Hydroelectric Power Station (22d Congress of the
CPSU); album of engineering drawing] Volzhskaya gidroelektro-
stantsiya im. XXII s"ezda KPSS; al'bom chertezhei. Moskva,
Gosenergoizdat. Pt.2. [Organization and the carrying out of
installation and construction operations] Organizatsiya i
proizvodstvo stroitel'no-montazhnykh rabot. 1963. 74 p.
(MIRA 16:11)

1. Moscow. Vsesoyuznyy proyektno-izyskatel'skiy i nauchno-
issledovatel'skiy institut "Gidroproyekt" im. I.Ya.Zhuk.
(Volga Hydroelectric Power Station(22d Congress of the CPSU))

SEVAST'YANOV, V.M.

AUTHOR: Sevast'yanov, V.M. Engineer

130-10-4/18

TITLE: Production of Ball-bearing Steel in Large Electric
Furnaces (Vyplavka sharikopodshipnikovoy stali v bol'shikh
elektropechakh)

PERIODICAL: Metallurg, 1957, No.10, pp. 9 - 10 (USSR).

ABSTRACT: The author describes the production of ball-bearing steel in 40-ton electric furnaces in No.3, electric steel-melting shop at the "Dneprospetsstal'" Works. These furnaces have magnesite-chromite roofs and walls of rammed magnesite-dolomite - coal-tar pitch blocks. Because the shop is supplied with high-sulphur scrap, the author devotes attention to desulphurisation (as well as other melting factors) and gives a table (Table 1) showing the relation between tapping and final sulphur contents. Tracing the steady increase in the proportion of the steel produced in 40-ton furnaces, he gives results of quality-control data for this product and that obtained in 20-ton furnaces (Table 2). These data show little difference in the quality of the metal. There are 2 photographs and 2 tables.

ASSOCIATION: "Dneprospetsstal'" Works (Zavod "Dneprospetsstal'")

AVAILABLE: Library of Congress.
Card 1/1

L 1345-66 EEC(k)-2/EWT(d)

ACCESSION NR: AP5024376

UR/0286/65/000/015/0055/0055
621.317.333.6

AUTHOR: Creysukh, M. A.; ⁴⁴Sevast'yanov, V. N. ⁴⁴

TITLE: A device for measuring the intensity of ionization processes. Class 21,
No. 173317 40
B

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 15, 1965, 55 9M

TOPIC TAGS: electronic measurement, ionization phenomenon, electric insulation

ABSTRACT: This Author's Certificate introduces a device for measuring the intensity of ionization processes (corona, creepage) in insulation. The unit contains an amplifier, amplitude discriminator and pulse counter. Accuracy is improved by connecting an amplitude inverter between the amplifier and the discriminator. The amplitude inverter contains a phase inverter with an electronic switch connected at the output. This switch is based on a double triode with the control grids connected through opposing diodes to the output of the phase inverter. A switch connected between the midpoints of the diodes and the grids is used for isolating one or another polarity of the signals fed to the grid.

ASSOCIATION: none

SUBMITTED: 12Mar64

ENCL: 01
NO REF SOV: 000

SUB CODE: EE, EC
OTHER: 000

Card 1/2

L 1345-66

ACCESSION NR: AP5024376

ENCLOSURE: 01

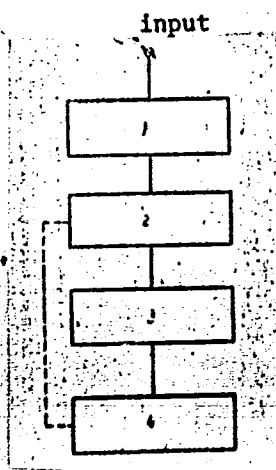


Fig. 1. 1--amplifier; 2--amplitude inverter; 3--amplitude discriminator; 4--pulse counter

Card 2/2

L 57537-65 EWT(m)/EWA(d)/T/EWP(t)/EWP(k)/EWP(b)/EWA(h)/EWA(c) Pf-4/Peb
IJP(c) JD/HW

ACCESSION NR: AR5015181

UR/0137/65/000/005/1030/1030

SOURCE: Ref. zh. Metallurgiya, Abs. 51196

AUTHOR: Severdenko, V. P.; Klubovich, V. V.

TITLE: The effect of ultrasonic vibrations on the process of the elongation of copper

CITED SOURCE: Sb. Primeneniye ul'trazvuka v mashinostr. Minsk, Nauka i tekhnika, 1964, 3-6

TOPIC TAGS: copper, metal elongation, ultrasonic vibration, metal deformation, deformation resistance, static load, ultrasound irradiation, strengthening, dislocation

TRANSLATION: Samples were made of technical grade copper annealed at 680°C. With application of ultrasonic vibrations at a frequency of 23 kilocycles to the static elongating load, the deformation resistance of the metal is considerably lowered; with removal of the ultrasonic vibrations, the deformation resistance again assumes its original value (corresponding only to the action of the static load). The lowering of deformation resistance grows with an increase in

Card 1/2

L 57537-65

ACCESSION NR: AR5015181

amplitude of the ultrasonic vibrations. Preliminary ultrasonic irradiation applied to an unloaded metal strengthens it. The weakening effect of ultrasonic vibrations applied to a static load is connected with the activation of fixed dislocations; the increase in strength with preliminary irradiation of the metal is explained by a partial rearrangement of the dislocation lattice; to obtain the strengthening effect the amplitude of ultrasonic vibrations must be not less than a certain minimum value, but at large amplitudes the strengthening effect also dies out. V. Geminov.

SUB CODE: MM

ENCL: 00

dm
Card 2/2

L 57524-65 EWT(d)/EWP(e)/EWT(m)/EWA(d)/EWP(v)/EPR/EWP(t)/EWP(k)/EWP(h)/
EWP(z)/EWP(b)/EWP(l)/EWA(c) Pf-4/Ps-4 IJP(c) JD/HW

ACCESSION NR: AR5013011

UR/0137/65/000/004/D024/D024
621.771.24+621.762

SOURCE: Ref. zh. Metallurgiya, Abs. 4D156

AUTHOR: Severdenko, V. P.; Lozhechnikov, Ye. B.; Shelamov, V. A.

TITLE: Rolling SAP strip directly from powder

CITED SOURCE: Tr. 7 Vses. nauchno-tekhn. konferentsii po poroshk. metallurgii.
Yerevan, 1964, 290-296

TOPIC TAGS: aluminum powder, aluminum alloy, rolling mill, metal powder rolling

TRANSLATION: Tests are described on rolling of aluminum powder into strip on a two-high mill with different roll diameters. Power and technological parameters of the rolling process were determined. Results of the investigations are presented and conclusions are derived. A. Leont'yev.

SUB CODE: 1E, MM

ENCL: 00

Card 1/1

SEVERDENKO, V.P.; GURSKIY, L.I.

Certain characteristics of fractional rolling. Izv. vys. ucheb.
zav.; chern. met. 8 no.5:119-123 '65. (MIRA 18:5)

1. Fiziko-tekhnicheskii institut AN BSSR.

L 52249-65 EFF(c)/EWT(d)/EWT(m)/EWP(k)/EWA(c)/EWP(h)/EWP(b)/T/EWA(d)/EWP(l)/
EWP(v)/EWP(t) Pf-l/Pr-l JB/HW/DJ

ACCESSION NR: AP5011088

UR/0250/65/009/003/0167/0168

34
33
B

AUTHOR: Severdenko, V.P.; Tomilo, A.P.

TITLE: Heat insulation effect of lubricants in hot stamping

SOURCE: AN BSSR. Doklady, v. 9, no. 3, 1965, 167-168

TOPIC TAGS: hot stamping, stamping lubricant, thermal insulation, die temperature, lubricant insulating effect, sulfite cellulose liquor

ABSTRACT: A study was made of the kinetics of formation of the boundary layer in a forging - die system and of the temperature regime of the dies in relation to the type of lubricant used. The measurements were made during stamping on an MkP-630 mechanical forging press, K-117A crank press, and a special unit which made it possible to vary the specific pressures in the contact zone over a wide range. The studies led to the following conclusions: the use of lubricants based on sulfite cellulose liquor lowers the temperature of the press die by 7 - 15% and increases the heat erosion resistance of the dies by 8 - 12%. Lubricants based on oil and salt solutions are of little use in press dies. The heat insulation effect of lubricants is determined by the heat transfer and thermal conductivity coefficients of the gas interlayer (consisting of products of decomposition of the lubricant)

Card 1/2

L 52249-65

ACCESSION NR: AP5011088

and of the film of solid filler. Orig. art. has: 2 figures.

ASSOCIATION: Fiziko-tekhnicheskiy Institut AN BSSR (Physics and Engineering
Institute, AN BSSR)

SUBMITTED: 01Dec64

ENCL: 00

SUB CODE: IE, FP

NO REF SOV: 003

OTHER: 000

Card 2/2 *7mb*

Card
SEVAST'YANOV, V. S.: Master Tech Sci (diss) -- "Investigation of the process of shock breaking of brittle rock as applied to the working part of shaft-sinking combine". Moscow, 1958. 16 pp (Main Admin of Sci Res and Design Organizations Gosplan USSR, All-Union Sci Res Coal Inst VUGI), 150 copies (KL, No 4, 1959, 127)

AUTHORS: Sevast'yanov, V.S. and Gurov, S.S. SOV/130-58-7-9/35

TITLE: The Metallurgists of Dneprodzerzhinsk (Metallurgi
Dneprodzerzhinska)

PERIODICAL: Metallurg, 1958, Nr 7, pp 20 - 21 (USSR)

ABSTRACT: The authors mention very briefly the early history of the Dneprodzerzhinsk Iron and Steel Works and the present world-wide use of its products. They state that in the first quarter of this year, all production targets have been exceeded and mention the daily discussion in the melting shop of operating results. A continuous lime burning unit, designed by the works director, G.G. Oreshkin, Engineer A.K. Rudkov and N.Z. Plotkin has been advantageously (a 10% sinter production increase) adopted in the sinter plant, in Nr 3 melting shop an electronic furnace firing controller has been introduced for the first time in the USSR, new repeaters have been installed in the section mills and new charging gear on the blast furnaces. Preparations are being made to automate the blooming mill, and the production of ore pellets and constructing of a fourth converter are to start soon. Converter practice has already been automated with the spectrographic determination of the completion of the process. The authors name the following

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The Metallurgists of Dneprodzerzhinsk

SOV/130-58-7-9/35

works' personnel who have distinguished themselves: P.P. Lygun, Susida, Khren', Gorb, Verkhoglyad, Chuvachko, Fik, Dedushev, Kotov, Bogun, F.P. Taraba. They describe measures taken against unsatisfactory workers. There are 2 illustrations.

ASSOCIATION: Dneprodzerzhinskiy metallurgicheskiy zavod
(Dneprodzerzhinsk Metallurgical Works)

Card 2/2

1. Steel industry--USSR
2. Sintering plants--Equipment
3. Spectrographic analysis--Applications

SEVAST'YANOV, V.T.

Efficiency promoters working on the Elgava division. Put' i put.
khoz. no. 8:30-31 Ag '53. (MIRA 11:8)

1. Zamestitel' nachal'nika distantzii, stantsiya Yelgava II,
latviyskoy dorogi.
(Latvia--Railroads--Tools and implements)

SOV/180-99-1-28/29

AUTHOR: Solomonov, M.S.

TITLE: Conference on the Physics of the Disruption of Rock and Tool Wear (Soveshaniye po fizike razrusheniya goruykh i porod i iznoshivaniya priborov)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Metallurgiya i toplivo, 1959, No. 1, pp. 123-124 (USSR)

ABSTRACT: On 18-20 November 1958 a conference was held at the Institut gornogo dela AN SSSR (Mining Institute AS USSR). One group on the physics of rock breakdown, heard the following reports: A.N. Zelenin, (MCD AN SSSR), on "Some Investigations in the Field of Mohr's Ring Construction"; A.I. Beron, VUGI, on "Physical Nature of Effects in the Cutting of Brittle Rocks"; B.Ye. Rykalskiy, VNIIT, on "Mechanism of Rock Breakdown in Static and Dynamic Insertion of Pitches"; I.P. Samoylov, NIIOST, and Shih Chung-han (KMT) on "Experimental Investigation with the Aid of Radioactive Isotopes of the Processes of the Introduction of Symmetrical and Asymmetrical Pitches into Rocks"; V.V. Petrov, Tomskiy politekhnicheskii institut (Tomsk Polytechnical Institute), on "The Breakdown of Rock in Vibration-Rotation Drilling by the Core Method".

Card 1/3

The second group, dealing with tool durability, heard the following reports: A.V. Kuznetsov (UD AN USSR) on "Abrasive Properties of Rocks and their Influence on Drill-Edge Shunting (in Perforation Drilling)"; M.I. Samodubov, NIIOST, on "Investigation of Rock-Cutting Tool Wear with the Aid of Radioactive Isotopes"; A.I. Grits'yenko, VUGI, on "Investigation of Tool Durability in the Course of Lapsing Shipping Cutting-Tool Wear"; A.I. Grits'yenko, VUGI, on "Investigation of Tool Wear in Stone Cutting and Friction Work"; G.G. Karyuk, Kirovskiy politekhnicheskii institut (Kirovskiy Polytechnical Institute), on "Investigation of ShEN-Combine Cutting-Tool Wear"; V.E. Kiriyenko, Opytno-issledovatel'skiy tsentr Moril'skogo kombinata (Experimental-research department of the Moril'skiy combine) on "Increasing the Durability of the Drilling Tool and the Drillability of the Gabbro-diorites of the Moril'sk. Deposits"; B.Ye. Lyubimov on the "Work of Diprora-glass".

Afterwards communications were presented by representatives of the Dnepropetrovskiy gosyuz institut (Dnepropetrovsk Mining Institute), Kirovskiy politekhnicheskii

Card 2/3

institut (Kirovskiy Polytechnical Institute), Dnepropetrovskiy gosyuz institut (Dnepropetrovsk Mining Institute), Kirovskiy politekhnicheskii institut (Kirovskiy Polytechnical Institute), and others. The conference noted that little work had been done on some of the subjects discussed. It recommended that work on the physics of rock disruption should be carried out mainly at the UD AN USSR, the Institut geologii i dobychi poloznykh iskopayemykh AN SSSR (Institute of Geology and Extractions of Useful Minerals, AS USSR) VUGI and VNIIT, and work on tool wear and breakage preferentially at NPI, AIEN, Gidromash, VUGI, VNIIT and the Institut tverdykh splavov (Hard-Alloys Institute).

Card 3/3

S/194/61/000/012/010/097
D209/D303

AUTHORS: Sevast'yanov, V. V., Likhterov, I. M., Petukhov, V.N.,
Sherman, B. P., Fedotov, V. K. and Golovach, V. K.

TITLE: Introducing level-meters to nonferrous metallurgy
plants

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika,
no. 12, 1961, 31, abstract 12A229 (Radioakt. izotopy i
yadern. izlucheniya v nar. kh-ve SSSR. V. 3, M., Gos-
toptekhzdat, 1961, 162-164)

TEXT: Described is a high sensitivity positional level-meter (L)
type γ PH-1013 (URP-1013) for signalling attainment of the degree of
separation between two substances of different densities without
direct contact with the system under investigation. The separation
is determined by recording the change of intensity of γ -radiation
passing through the mixture. The instrument consists of a power
unit, four radiation sources and four radiation receivers. Various
installation methods of L are described, depending on the proper-



Card 1/2

Introducing level-meters ...

S/194/61/000/012/010/097
D209/D303

ties of the mixture. Installation diagrams of L are given. The application of L to the bins of a crushing-agglomerating plant resulted in its automation. There are figures. [Abstractor's note: Complete translation.]

Card 2/2

ANFILOV, A.A., inzh.; BAKALEYNIK, Ya.M., inzh.; BIRGER, G.I.,
inzh.; BRUK, B.S., inzh.; BUROV, A.I., inzh.; GINZBURG, V.L.,
inzh.; ZABELIN, V.L., inzh.; ZAPLECHNYI, Ye.G., inzh.; ISAYEV,
D.V., inzh.; KLIMOVITSKIY, A.M., inzh.; KRYUCHKOV, V.V., inzh.;
KOTOV, V.A., inzh.; LEYDERMAN, A.Ye., inzh.; PODGOYETSKIY,
M.L., inzh.; SAZHAYEV, V.G., inzh.; SEVAST'YANOV, V.V., inzh.;
FILIPPOV, S.F., inzh.; FROMBERG, A.B., inzh.; SHNEYEROV, M.S.,
inzh.; ERLIKH, G.M., inzh.; VERKHOVSKIY, B.I., red.; ZUBKOV,
G.A., red.; KARKLINA, T.O., red.; OVCHARENKO, Ye.Ya., red.;
ANTONOV, B.I., ved. red.

[New means of automatic and centralized control for nonfer-
rous metal mines] Novye sredstva avtomatizatsii i dispatcher-
skogo upravleniia dlia rudnikov tsvetnoi metallurgii. Moskva,
Nedra, 1965. 93 p. (MIRA 18:4)

14(11)

SOV/32-25-2-36/78

AUTHOR:

Sevast'yanov, V. Ya.

TITLE:

Methods for Measuring Deformation and Thickness of the Layer Removed From a Flat Sample for the Calculation of Residual Stresses (Metodika zamera deformatsiy i tolshchiny snyatogo sloya ploskogo obraztsa dlya rascheta ostatochnykh napryazheniy)

PERIODICAL:

Zavodskaya Laboratoriya, 1959, Vol 25, Nr 2, pp 202 - 203 (USSR)

ABSTRACT:

The determination of residual stresses arising at the surface of workpieces during production is mainly carried out according to N. N. Davidenko's method. This method is based on the determination of deformations caused by residual stresses after thin metal layers have been removed from the surface of the sample. The present method is based on the principle, proposed by N. N. Davidenko (Ref 5), of measuring the bending of a flat sample (Fig 1) and a simultaneous measurement of the thickness of the removed layer (Fig 2). By this, some sources of errors are eliminated. Measurement results (Table) of steel S-20 samples (20x3x110 mm), and a diagram (Fig 3)

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Methods for Measuring Deformation and Thickness of the SOV/32-25-2-36/78
Layer Removed From a Flat Sample for the Calculation of Residual Stresses

of the distribution of residual stresses in the cross-section of the surface layer are given. In the pre-treatment of the sample it is necessary to make sure that the surface is sufficiently clean. There are 3 figures, 1 table and 6 Soviet references.

ASSOCIATION: Kuybyshevskiy industrial'nyy institut im. Kuybysheva
(Kuybyshev Industrial Institute imeni Kuybyshev)

Card 2/2

SEVAST'YANOV, V. Ya., Cand Tech Sci -- "Cold hardening and
residual stresses ^{in the} ~~when~~ cutting ^{of} plastic metals." Mos, 1961.

(Min of Higher and Sec Spec Ed RSFSR. Mos Aviation-Technology ^{Inst}
Inst) (KL, 8-61, 249)

- 304 -

SOVKIN, Vasilii Fedorovich; NIKOLAEV, Aleksandr Ivanovich[deceased];
SEATUNOV, Mikhail Petrovich; BYKOV, Yevgeniy Viktorovich;
SEVAST'YANOV, Vladimir Yakovlevich; MIKHAYEV, N.I., red.

[Increasing the productivity and improving the quality of
surfaces subjected to grinding] Povyshanie proizvoditel'-
nosti i uluchshenie kachestva poverkhnosti pri shlifovanii.
Kuibyshev, Kuibyshevskoe knizhnoe izd-vo, 1963. 109 p.
(MIRA 17:7)

VOROB'YEV, Kharlampiy Nargeyevich; MAZUROV, Dmitriy Yakovlevich;
SOKOLOV, Aleksey Aleksandrovich. Prinimal uchastiye
SEVAST'YANOV, Ye.F.; FUFAYEVA, G.I., red.

[Heat-engineering processes and the equipment of silicate
using industries] Teplo tekhnologicheskie protsessy i ap-
paraty silikatnykh proizvodstv. Moskva, Vysshaya shkola,
1965. 272 p. (MIRA 18:8)

ACC NR: AT6036701

SOURCE CODE: UR/0000/66/000/000/0087/0096

AUTHOR: Severdenko, V. P. (Academician AN BSSR); Kalachev, M. I.; Ankut, P. P.; Sevast'yanov, Ye. S.

ORG: none

TITLE: The deformation of titanium by different stress state systems under testing conditions

SOURCE: AN BSSR. Fiziko-tekhicheskiy institut. Plastichnost' i obrabotka metallov davleniyem (Plasticity and metalworking by pressure). Minsk, Nauka i tekhnika, 1966, 87-96

TOPIC TAGS: titanium, plastic deformation, temperature dependence, tensile stress, compressive stress, torsion, deformation rate, low temperature, high temperature

ABSTRACT: The mechanical and plastic properties of technically pure titanium (VTI-1) were given for different stress states, temperatures, and deformation rates. Tension, compression, and torsion tests were done at temperatures ranging from -196° to 800°C and strain rates ranging from $4 \cdot 10^{-3} \text{ min}^{-1}$ to 3.0 min^{-1} . Stress-strain curves are shown for tension and compression, while torque-twist curves are shown for the torsion tests. The dependence of tensile and compressive stress on $\log V_d$, where V_d is the strain rate, is given for six different temperatures and four different values of

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ACC NR: AT6036701

strain. These data are compared to the well known equation

$$\sigma_y = \sigma_0 + k \ln (V_d/V_0),$$

where σ_0 , k , and V_0 are constants and $V_d > V_0$. The VTI-1 titanium was sensitive to temperature changes, since the dependence was satisfied for all strain rates but not for all temperature ranges. In the range 20-400°C, $\sigma_i = f(\ln V_d)$ was linear with k decreasing as a function of temperature. At temperatures -110 and -196°C the strain rate did not affect the stress; however, at 600°C and especially at 800°C, the stress rose sharply as a function of $\ln V_d$. The true uniform deformation in tension, given as a function of temperature, went through a maximum at 175-300°C, depending on the strain rate. At higher strain rates the maximum occurred at lower temperatures. The effect was caused by deformation aging and twinning which together changed the slip behavior during plastic deformation. The limiting plastic deformation in compression, marked by the first appearance of cracks, was minimal in the 175-300°C range. This corresponded with the minimum in tensile plasticity. At about 400°C, the plasticity increased. The torsion results closely paralleled those obtained in tension and compression. Orig. art. has: / 5 figures, 1 formula.

SUB CODE: 11/

SUBM DATE: 08Jul66/

ORIG REF: 002/

OTH REF: 002

Card 2/2

81744

S/089/60/008/05/03/008

B006/B056

211330

AUTHORS: Smirnov-Averin, A. P., Galkov, V. I., Sevast'yanov, Yu. G.,
Krot, N. N., Ivanov, V. I., Sheynker, I. G., Stabenova,
L. A., Kir'yanov, B. S., Kozlov, A. G.

TITLE: Investigation of a Used Fuel Element of the First Nuclear
Power Station 19

PERIODICAL: Atomnaya energiya, 1960, Vol. 8, No. 5, pp. 446 - 447

TEXT: In the present paper the authors give a report on investigations of the isotope composition, the burnup and the state of the shells of used fuel elements of the Pervaya atomnaya elektrostantsiya (First Nuclear Power Station) of the Soviet Union. The fuel elements investigated had been in operation for 1160 days. Carrying out of the remote investigations is briefly described. A thin oxide film was found on the outer shells, but no damage was observed. The outer diameter was measured by means of a remote micrometer at various places, and certain deformations were found. Averaged over the entire length of the element an increase of the diameter from 14.11 ± 0.02 to 14.20 ± 0.02 mm was found. An investigation

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Investigation of a Used Fuel Element of
the First Nuclear Power Station

S/089/60/008/05/03/008
B006/B056

of the inner shell showed that it had a brown deposit (about 1μ thick), which was identified as an incrustation (and not as a corrosion product of steel). The burnup was determined according to the Cs^{137} -activity, which was separated chromatographically by the sample from the element; this isotope was especially well suited because of its long half-life. Fig. 1 shows the course of burnup along the element (from bottom to top). The mean burnup amounted to 12.5%. In the case of samples which were taken at a distance of 95 cm from the lower end of the element (range of maximum burnup), the burnup was determined mass-spectrometrically. The uranium content in these samples was 4.32%, which corresponds to a burnup of 16.1%. Fig. 2 shows the distribution of the entire α -, β -, and γ -activities along the element (from bottom to top). The transuranium-isotope content was determined according to the alpha spectra and the number of spontaneous fissions. Fig. 3 shows the distribution of the isotopes Pu^{240} , Pu^{239} , and Pu^{238} , and Am^{241} along the fuel element. The $\text{Pu}^{238,239,240,241}$ and Am^{241} content is given in a Table ($2.54 \cdot 10^{-4}$, 1.20, 0.102, $1.27 \cdot 10^{-2}$, $1.86 \cdot 10^{-3}$) and is compared with several theoretical

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Investigation of a Used Fuel Element of
the First Nuclear Power Station

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S/089/60/008/05/03/008
B006/B056

data. The authors finally thank G. M. Kukavadze and R. N. Ivanov for the mass-spectroscopic analysis of the irradiated uranium, and V. N. Sharapov for calculating the isotope composition. There are 3 figures, 1 table, and 2 references: 1 Soviet and 1 American.

SUBMITTED: January 28, 1960

Card 3/3

PALIBIN, P.A.; SMIRNOV-AVERIN, A.P.; SEVAST'YANOV, Yu.G.; BULANOV, L.A.;
SHASHARIN, G.A.

Organic heat-transfer agents in reactor engineering. Inzh.-fiz.
zhur. 4 no. 5:127-138 My '61. (MIRA 14:5)
(Nuclear reactors—Materials)

NEFEDOV, V.D.; KHARITONOV, N.P.; LI DE-FU [Li Tieh-fu]; GUSEV, Yu.K.;
SKOROBOGATOV, G.A.; SMIRNOV-AVERIN, A.P.; SEVAST'YANOV, Yu.G.;
KHUDBIN, Yu.I.

Tritiation of organosilicon compounds by the method of rebounding
tritium atoms. Zhur.ob.khim. 32 no.2:614-618 F '62. (MIRA 15:2)

1. Institut khimii silikatov AN SSSR i Leningradskiy
gosudarstvennyy universitet.

(Silicon organic compounds)

(Tritium)

S/089/63/014/003/015/020
B102/B186

AUTHORS: Sevast'yanov, Yu. G., Bulanov, L. A., Kaplan, Ye. P.,
Nefedov, O. M., Smirnov-Averin, A. P.

TITLE: An activation method for quantitative determination of
organically bound sulfur impurities in polyphenyls

PERIODICAL: Atomnaya energiya, v. 14, no. 3, 1963, 324 - 326

TEXT: A great disadvantage of using polyphenyls as coolants and moderators in power reactors is their content of sulfur impurities (due to the production conditions). S^{32} changes over into P^{32} in fast-neutron induced (n,p) reactions, while P^{32} emits betas of 1.7 Mev and renders the coolant regeneration difficult; moreover, sulfur reacts with the tube material to form metal sulfides which cause corrosion. In order to determine the S^{32} content an activation method based on the $S^{32}(n,p)P^{32}$ reaction was developed. The P^{32} activity is determined on comparison with a reference standard (pure Na_2SO_4), the irradiation (total 10^{18} n/cm^2)

Card 1/2

An activation method for ...

S/089/63/014/003/015/020
B102/B186

taking 26 - 28 hrs; between irradiation and analysis a period of 7 - 10 days was used for complete decay of Na^{24} . The induced activity was measured with an end-window counter with a 78 mg/cm^2 aluminum filter. A content of $\sim 0.1\%$ S in a batch of 10 - 20 mg was found to correspond to ~ 3000 pulses/min. Consequently, when the irradiation time can be raised 3 to 5 times, quantities of 0.001 - 0.0005 % S can even be determined. The sensitivity can be further increased by concentrating the sample. There is 1 table.

SUBMITTED: March 10, 1962

Card 2/2

L 9876-63 EFR/EWP(j)/EPF(c)/EPF(n)-2/SSI(m)/BDS/ES(s)-2 AFFTC/ASD/ESD-3/AFWL/
SSD Ps-4/Pc-4/Pr-4/Pu-4/Pt-4 RM/KS/KSF

ACCESSION NR: AP3002260

S/0089/63/014/006/0555/0558

AUTHOR: Sevast'yanov, Yu. G.; Bulanov, L. A.; Smirnov-Averin, A. P.; Kaplan, Ye. P.; Nefedov, O. M.; Chel'tsova, M. A.; Petrov, A. D.

TITLE: Thermal and radiation stability of certain aromatic compounds

SOURCE: Atomnaya energiya, v. 14, no. 6, 1963, 555-558

TOPIC TAGS: pyrolysis, radiolysis, Gamma radiation, neutron radiation, thermal stability, radiation stability, polycyclic aromatic hydrocarbons, naphthalene, anthracene, biphenyl, terphenyl, alkylated biphenyls, alkylated terphenyls, diphenyl methane, phenoxybiphenyl

ABSTRACT: The pyrolysis and Gamma radiation induced and neutron-radiation induced radiolysis of a number of polycyclic aromatic hydrocarbons, (isopropyl- and phenyl-substituted biphenyls, naphthalenes, and terphenyls; polyphenylenes with methylene bridges between the rings; and phenoxybiphenyl isomers) have been studied. The samples were degassed beforehand to prevent oxidation. A study of pyrolysis at 400C indicated that the stability of biphenyls and terphenyls was two to three orders above that of alpha-phenylnaphthalene, the alkyl-

Card 1/3

L 9876-63

ACCESSION NR: AP3002260

2

substituted hydrocarbons, and the aromatic ethers. An increase in the number of alkyl substituents in the hydrocarbons decreased their thermal stability. Of the alkyl-substituted hydrocarbons, isopropyl-m-terphenyl was found to be the most stable to decomposition to gaseous products and isopropylbiphenyl the most stable to polymerization. Thermal stability decreased from biphenyl to phenoxybiphenyls. The pyrolysis kinetics was studied by additional pyrolysis of the most stable compound, m-terphenyl, at 194, 475, and 459C. From the results obtained, rate constants of pyrolysis were calculated, and activation energy was found to be about 70 kcal/mol. Pyrolysis at 410C of polyphenylenes with methylene bridges between the rings revealed that their thermal stability was three orders below that of m-terphenyl. In experiments with irradiation of the hydrocarbons in a neutron field (10 sup 13 n/cu cm sec) at 60 and 350C, m-terphenyl was found to be the most stable of all the compounds. An increase in temperature from 60 to 350C increased radiation-induced decomposition by a factor of 3.8. From Gamma-irradiation experiments (dose, 10 sup 21 ev/g) it was found that the energy absorbed was not sufficient to produce radiolytic decomposition of biphenyl, terphenyls, or phenylnaphthalenes. It was concluded that the superior thermal and radiation stability shown by biphenyl and by the terphenyl isomers makes them suitable as heat transfer agents for nuclear power reactors. Orig. art. has: 5 tables.

γ

A

Card 2/3

KRASNOV, N.N.; DMITRIYEV, P.P.; SEVAST'YANOV, Yu.G.; BEZMATERNYKH, A.S.

Production of Al^{26} by irradiating magnesium with 20 Mev. deuterons.
Atom. energ. 19 no.1:62-63 J1 '65. (MIRA 18:7)

SEVAST'YANOV, Yu.G.; BEZMATERNYKH, A.S.

Isolation of Na^{22} from a magnesium target irradiated with deuterons.
Atom. energ. 19 no.1:63-64 J1 '65. (MIRA 18:7)

L 23511-65 EWT(m)/EPF(c)/EPR/EWP(j) Po-4/Pr-4/Ps-4/P1-4 RPL WW/
JW/RM

ACCESSION NR: AP4047127

S/0080/64/037/010/2283/2286

AUTHOR: Kaplan, Ye. P.; Kazakova, Z. I.; Sevast'yanov, Yu. G.;
Smirnov-Averini, A. P.; Petrov, A. D.

3
B

TITLE: Preparation and properties of isopropylterphenyl

SOURCE: Zhurnal prikladnoy khimii, v. 37, no. 10, 1964, 2283-2285

TOPIC TAGS: isopropylterphenyl, synthesis, preparation, property, diisopropylterphenyl, heat transfer agent, thermal stability, radiation stability, isomerization

ABSTRACT: The preparation of isopropylterphenyl by alkylation and its isomerization under alkylation conditions were investigated, as well as its thermal, radiation and viscosity properties. Alkylation of terphenyl with isopropyl chloride using $AlCl_3$ catalyst in hexane solution at 0-25C gave mono-tetra isopropylterphenyls. The monoisopropylterphenyl yield was optimum with reactant terphenyl: isopropyl chloride: $AlCl_3$ ratio of 1:2:0.5; diisopropylterphenyl was maximum with a 1:4:1 ratio. Isomerization depended on catalyst (no isomerization with H_3PO_4)

Card 1/2

L 23511-65

ACCESSION NR: AP4047127

and temperature (isomerization with $AlCl_3$ catalyst increased with temperature). Isopropylterphenyl has high radiation and thermal stability. It can be used as a heat transfer agent in the 300-390C temperature range. Its higher boiling temperature and smaller decomposition in comparison to isopropylidiphenyl make it more promising for this application. Orig. art. has: 4 tables and 1 figure

ASSOCIATION: Non

SUBMITTED: 02Sep63

ENCL: 00

SUB CODE: OC, GC

NO REF SOV: 003

OTHER: 007

Card 2/2

L 4032-66 ENT(m)/EWA(h) DM
ACCESSION NR: AP5027962

UR/0089/65/019/001/0062/0063

AUTHOR: Krasnov, N. N.; Dmitriyev, P. P.; Sevast'yanov, Yu. G.; Bezzmaternykh, A. S.

TITLE: Production of sup 26 Al during irradiation of Mg with 20-Mev deuterons

SOURCE: Atomnaya energiya, v. 19, no. 1, 1965, 62-63

TOPIC TAGS: aluminum, radioisotope, irradiation, magnesium, deuteron, gamma spectrum, deuteron beam, isotope separation

ABSTRACT: High specific-activity sup 26 Al was obtained in the reactions sup 25 Mg(d,n)⁺ and sup 26 Mg (d,2n) by irradiating Mg with a 20-Mev deuteron beam. The steps involved in the separation of the radiochemically pure Al are listed. The sup 26Al gamma spectrum, measured on a scintillation spectrometer, is presented. The activity of the sup 26 Al source was measured by comparison of the 511-kev gamma line intensity with a sup 22 Na standard and of the 1830-kev intensity with a sup 88 Y standard. "The authors thank Z.P. Dmitriyeva for the carrying-out of the measurements on the spectrometer." Orig. art. has: 1 graph and 1 table.

ASSOCIATION: none

SUBMITTED: 20Jul64

NO REF SOV: 002

ENCL: 00

OTHER: 004

SUB CODE: NP

NA

Card 1/1 DP

L 6470-66 EWT(m)/EPF(c)/ETC/EPF(n)-2/ENG(m)/ENA(d)/ENP(t)/ENP(z)/ENP(b) IJP(c)
 ACCESSION NR: AP5019815 MJW/JD/DM UR/0089/65/019/001/0063/0064
 541.15

AUTHOR: Sevast'yanov, Yu. G.; Bezmaternykh, A. S.

TITLE: Separation of Na^{22} from a magnesium target bombarded by deuterons

SOURCE: Atomnaya energiya, v. 19, no. 1, 1965, 63-64

TOPIC TAGS: magnesium, sodium, deuteron bombardment, deuteron interaction, isotope separation/ MA8

ABSTRACT: In view of the fact that existing separation methods require large quantities of washing solutions and consume much time, the authors propose a method for dumping the bulk of the magnesium (94--97%) by precipitating it in the form of magnesium sulfate from water-acetone solutions. The subsequent purification of Na^{22} is by ion exchange. A rotating target of MA8 alloy (~95% Mg) was used with a hemispherical head bombarded in the internal beam of a cyclotron with 20-Mev deuterons (300 μa current). The experiments aimed at choosing the right solvent and the solution technique, as well as the final procedure developed, are described briefly. "The authors thank P. P. Dmitriyev for help and consultations during the radiometric measurements and B. S. Kir'yanov and V. P. Sharov for participating in a discussion of the results." Orig. art. has: 3 tables.

Card 1/2

L 6470-66

ACCESSION NR: AP5019815

ASSOCIATION: none

SUBMITTED: 14Aug64

NR REF SOV: 003

ENCL: 00

OTHER: 004

SUB CODE: NP

CC

Card 2/2

CA SEVAST'YAN, Yu. L.

21

Changes of the electric characteristics of coal in thermal and in dielectric heating. Yu. L. Sevast'yan, N. N. Dolgoplov, Yu. L. Bur'yan, and V. S. Margolin (Moscow Chapter, Mendeleev Chem. Soc.). *Doklady Akad. Nauk S.S.S.R.* 74, 755-7 (1950).—Heating of finely ground (grain size <0.3 mm.) gas coal with the aid of a burner causes a progressive fall of the elec. resistance R , from about 100 megohm between 20 and 240°, still over 10 megohms at 340°, to about 1 megohm at 400°. In heating with a high-frequency field, the coal becomes conducting at 240-70°, its R falls to a few ohms, and is as low as 1 ohm at 400°. The dielec. loss angle $\tan \delta$ increases on heating with a burner up to 100°, then decreases, and increases again from 300° up; the dielec. const. increases from about 1.5 to 2.5 up to 100°, then decreases asymptotically to 1.5. In heating with a burner, the change of R with the temp. t between 350 and 450° is representable by $\log R = -0.011t + 11$; in heating with high-frequency, between 250 and 450°, $\log R = -0.00366t + 1.60$, and, between 250 and 500°, $\log \tan \delta = 0.0032t + 1.35$. Heating with a flame and heating with high-frequency evidently involve entirely different mechanisms. N. Thon

SEVAL (RUBIN V)		PROCESSES AND PROPERTIES INDEX	
B		19	
9297* Pyrolysis of Coal Under the Action of High-Frequency Current. (In Russian.) N. M. Karavaev, Yu. L. Sevast'yanov, N. N. Dolgoplov, and Yu. L. Bur'yan. <i>Doklady Akademii Nauk SSSR</i> (Reports of the Academy of Sciences of the USSR), new ser., v. 77, Apr. 11, 1951, p. 871-874. The above was investigated under conditions of dry distillation, that is, the pyrolysis is produced by dielectric heating, rather than by external application of heat. The study was performed between 10 and 1000°C., especially between 480 and 570°C. Method of investigation is described. Data are tabulated, charted, and discussed.			
ASB-35A METALLURGICAL LITERATURE CLASSIFICATION			
MATERIALS INDEX		PROCESS INDEX	
COMMON ELEMENTS		COMMON ELEMENTS	

SEVAST'YANOVA, A. [translator]; TIMOKHINA, N. [translator]

Manufacture of feed meal (from "The National Provisioner," Aug. 1962).
Mias.ind. SSSR 34 no.1:60-61 '63. (MIRA 16:4)
(United States—Feeds)

MOZGOVY, V.I. (Dnepropetrovsk); KORCHAGIN L.V. (Dnepropetrovsk); MNUSHKIN,
I.I. (Dnepropetrovsk); prinalni uchastiye: SEVAST'YANOVA, A.K.;
KUCHKOVA, M.M.

Effect of polyacrylamide on the filtration process of coal suspensions.
Izv. AN SSSR. Otd. tekhn. nauk. Met. i topl. no.3:125-129 My-Je '62.
(MIRA 15:6)

(Coal preparation)

1. SEVAST'YANOVA, B. A.; KOLMOGOROVA, A. N.
2. USSR (600)
4. Science
7. Introduction to theory of probabilities and mathematical statistics. Per. a angl. A. S. Monina i A. A. Petrova. Pod red. B. A. Sevast'yanova. Arley, N.; Bukh, E. R. (Authors) Predial. A. N. Kolmogorova. Moskva. Izd. Inostr. Lit. 1951.
9. Monthly List of Russian Accessions, Library of Congress, January, 1953. Unclassified.